

REMARKS

Claims 1-13 remain in the application and stand rejected.

Claim Rejections 35 U.S.C. § 102

Claims 1-13 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,112,566 to Nguyen et al. ("Nguyen"). The rejection is respectfully traversed. As will be more apparent below, Nguyen employs a scheduler architecture that is totally different from those presently claimed.

Claim 1 is patentable over Nguyen at least for reciting: "adding at least one of said plurality of operations to an operation list; switching an operation in said operation list to an active state; and scheduling all operations in said operation list that are in the active state to run on said wafer processing system." Nguyen discloses a sequencer that has a look-ahead program for preventing delays in wafer processing (Nguyen, Abstract). In Nguyen, a wafer list contains a list of wafers to be processed. The sequencer uses the wafer list to order the processing sequence and to find wafers in the sequence that may cause throughput problems in the future and may thus need correction (Nguyen, col. 7, line 63 to col. 8, line 9). However, in marked contrast to operations in the operation list of claim 1, wafers in Nguyen's wafer list are always active in that they do not have to be switched to the active state after being added to the wafer list. The wafers in Nguyen's wafer list will be run unless removed from the wafer list. There are no inactive wafers in Nguyen's wafer list. Examination of the data structures shown in FIGS. 3, 4, 5, and 6 and accompanying description in col. 6, line 43 to col. 8, line 21 of Nguyen also reveals that Nguyen does not disclose or suggest a scheduler architecture where a task or operation can remain in an operation list and not be run unless switched from an inactive to an active state. Although Nguyen provides a module to predict possible issues with an operation, Nguyen still merely discloses a conventional sequencer architecture that assumes all operations in an operation list are to be run.

Claims 2-5 depend on claim 1. Therefore, claims 2-5 are patentable over Nguyen at least for the same reasons that claim 1 is patentable, as well as because of the combination of features set forth in these claims and in claim 1. For example:

Claim 2 recites: "wherein each of said plurality of operations includes conditions for adding an operation to said operation list." Nguyen col. 6, line 45 to col. 8, line 21, cited in the last office action, does not disclose adding conditions for adding an operation to any operation list. For example, referring to block 210 of FIG. 3, the wafers in the wafer order list do not have any conditions for adding the wafer into the wafer list. The wafer move queue (Nguyen, FIG. 4) and the wafer management structure (Nguyen, FIG. 6) also do not disclose conditions for adding wafers to the wafer list.

Claim 3 recites: "wherein each of said plurality of operations includes conditions for switching an operation in the operation list to an active state." Nguyen col. 8, lines 10-21, cited in the last office action, discloses that the sequencer issues commands to move the wafers after the wafer move queue and wafer order list and other necessary information have been updated (e.g., reorder the wafers in the wafer order list per the look-ahead module). However, the aforementioned passage does not disclose a feature where the operations themselves include switching conditions for switching them to an active state.

Like Claim 1, claim 6 is patentable over Nguyen at least for reciting: "(a) adding at least one of said plurality of operations to an operation list, (b) switching an operation in said operation list to an active state, and (c) scheduling all operations in said operation list that are in the active state to run."

Claims 7-9 depend on claim 6. Therefore, claims 7-9 are patentable over Nguyen at least for the same reasons that claim 6 is patentable, as well as because of the combinations of features set forth in these claims and in claim 6.

Claim 10 is patentable over Nguyen at least for reciting: "a first level including conditions for adding said operation to an operation list and conditions for switching said

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operation to an active state." As previously discussed, Nguyen does not disclose or suggest an operation having conditions for adding the operation to an operation list nor conditions for switching the operation to an active state.

Claims 11-13 depend on claim 10. Therefore, claims 11-13 are patentable over Nguyen at least for the same reasons that claim 10 is patentable, as well as because of the combinations of features set forth in these claims and in claim 10.

### Conclusion

For at least the above reasons, it is respectfully believed that claims 1-13 are in condition for allowance. The Examiner is invited to telephone the undersigned at (408)436-2112 for any questions.

Respectfully submitted,  
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Dated: September 27, 2004

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